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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767.216	01/29/2004	Pamela R. Lipson	MIT-058CUS	2597

22494 7590 03/13/2007	EXAMINER	
DALY, CROWLEY, MOFFORD & DURKEE, LLP	KIM, PAUL	
SUITE 301A		
354A TURNPIKE STREET	ART UNIT	PAPER NUMBER
CANTON, MA 02021-2714	2161	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
	10/767,216	LIPSON ET AL.
Office Action Summary	Examiner	Art Unit	
	Paul Kim	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 December 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 22-24* is/are pending in the application.

    4a) Of the above claim(s) *6-21 and 25-36* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 22-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>12/20/05</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This Office action is responsive to the following communication: Amendment filed on 26 December 2006.

2.   Claims 1-5 and 22-24 are pending and present for examination. Claims 1 and 22 are independent.

Election/Restrictions

3.   Applicant's election without traverse of claims 1-5 in the reply filed on 26 December 2006 is acknowledged.

4.   Newly submitted claims 25-35 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: While claims 1-5 are directed to analyzing two images and comparing said images, Claims 25-35 are directed to processing images to compare a first image with a plurality of images to find a second image.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 25-35 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Information Disclosure Statement

5.   The information disclosure statement (IDS) submitted on 20 December 2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis

for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use
> or on sale in this country, more than one year prior to the date of application for patent in the United States.

7.   **Claims 1-5 and 22-24** are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al,

"Tools and techniques for color image retrieval" (NPL, hereinafter referred to as SMITH), published on

March 1996 by Proc. SPIE Vol. 2670, p. 426-437.

8.   **As per independent claims 1 and 22,** SMITH teaches:

> An image processing system for searching images on a network, the image process
> system comprising:
>
> (a) a search engine {See SMITH, page 3, subsection D, wherein this reads over "[t]he query is
> communicated to the VisualSEEk server on the World Wide Web through the Common Gateway
> Interface (CGI). The server answers the user's query by accessing the extracted meta-data that
> describes the images and videos in the archive"};
>
> (b) an image analyzer coupled to said search engine, said image analyzer for
> comparing first and second images provided thereto from said search engine {See
> SMITH, page 1, section II, wherein this reads over "color indexing by localized or regional color
> provides for partial or sub-image matching between images"}, wherein:
>
>> the first image is associated with a first code {See SMITH, page 2, subsection B, wherein
>> this reads over "[o]nce the image regions are identified, each region is characterized and
>> represented using a feature set"; and page 3, subsection B, wherein this reads over "[a] color
>> histogram is a high-dimensional feature vector typically having greater than 100 dimensions and
>> the comparison of histograms is computationally intensive"},
>>
>> the second image is associated with a second code {See SMITH, page 2, subsection B,
>> wherein this reads over "[o]nce the image regions are identified, each region is characterized
>> and represented using a feature set"; and page 3, subsection B, wherein this reads over "[a]
>> color histogram is a high-dimensional feature vector typically having greater than 100
>> dimensions and the comparison of histograms is computationally intensive"},
>>
>> the first code is descriptive of the first image's content {See SMITH, page 4, subsection
>> A, wherein this reads over "[a] color histogram denotes the joint probabilities of the intensities
>> of the three color channels"},
>>
>> the second code is descriptive of the second image's content {See SMITH, page 4,
>> subsection A, wherein this reads over "[a] color histogram denotes the joint probabilities of the
>> intensities of the three color channels"}, and

the image analyzer uses image analysis of the first and second images along with a comparison of the first and second codes in determining if the first and second images are likely to compare favorably {See SMITH, page 10, wherein this reads over "[t]he color histogram intersection was proposed for color image retrieval" and "[c]olors not present in the user's query image do not contribute to the intersection"}.

9.   **As per dependent claims 2 and 24,** SMITH teaches:

The system of claim 1 further comprising an input system coupled to one of said search engine and said image analyzer, said input system comprising at least one of:

a graphical user interface {See SMITH, Figure 3};

a facsimile system;

a camera system;

a scanner;

a network connection; and

a video system.

10.   **As per dependent claim 3,** SMITH teaches:

The system of claim 2 wherein each of said one or more feature modules defines at least one particular region of an image and at least one particular measurement to make on pixels within each of the at least one particular image region {See SMITH, page 4, subsection A, wherein this reads over "[t]he color histogram is computed by discerning the colors within the image and counting the number of pixels of each color"}.

11.   **As per dependent claim 4,** SMITH teaches:

The system of claim 3 wherein each of said one or more feature modules defines at least one measurement to make on one or more pixels in an image region neighboring the one particular image region {See SMITH, page 8, subsection E, wherein this reads over "[f]or each of the regions the generative color set c is recorded and the region area and location are measured"}.

12.   **As per dependent claims 5 and 23,** SMITH teaches:

The system of claim 3 further comprising a storage device having at least one image stored therein coupled to one of said a search engine, said image analyzer and said feature module {See SMITH, Figure 2}.

Conclusion

13.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is (571) 272-2737. The examiner can normally be reached on M-F, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on (571) 272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul Kim
Patent Examiner, Art Unit 2161
TECH Center 2100